

IN THE CLAIMS:

Please cancel Claims 1-28 without prejudice.

Please add the following new claims:

--29. (New) An isolated, extrachromosomal polynucleotide comprising at least 8 consecutive bases and up to about 100 consecutive bases of the sequence shown in SEQ ID NOS:1 or 2, or the complement thereof, wherein said isolated polynucleotide includes at least one polymorphic site shown in Table 1.

30. (New) The isolated, extrachromosomal polynucleotide of Claim 29, wherein the polymorphic site is at base 61465 of SEQ ID NO:1.

31. (New) The isolated, extrachromosomal polynucleotide of Claim 29, wherein the polymorphic site is at base 35983 of SEQ ID NO:1.

32. (New) A pair of isolated, extrachromosomal polynucleotides as in Claim 29.

33. (New) An isolated, extrachromosomal polynucleotide comprising at least 18 consecutive bases and up to about 100 consecutive bases of the sequence shown in SEQ ID NOS:1 or 2, or the complement thereof, wherein said isolated polynucleotide includes at least one polymorphic site shown in Table 1.

34. (New) The isolated, extrachromosomal polynucleotide of Claim 33, wherein the polymorphic site is at base 61465 of SEQ ID NO:1.

35. (New) The isolated, extrachromosomal polynucleotide of Claim 33, wherein the polymorphic site is at base 35983 of SEQ ID NO:1.

36. (New) A pair of isolated, extrachromosomal polynucleotides as in Claim 33.

37. (New) An isolated, extrachromosomal polynucleotide comprising a fragment of at least about 100 consecutive bases and up to about 235 consecutive kilobases of the sequence shown in SEQ ID NOS:1 or 2, or the complement thereof, wherein said isolated polynucleotide includes at least one polymorphic site shown in Table 1.

38. (New) The isolated, extrachromosomal polynucleotide of Claim 37 which is cDNA.

39. (New) The isolated, extrachromosomal polynucleotide of Claim 37 which is RNA.

40. (New) The isolated, extrachromosomal polynucleotide of Claim 37 which is genomic DNA.

41. (New) An isolated, extrachromosomal polynucleotide comprising a fragment of at least about 300 consecutive bases and up to about 235 consecutive kilobases of the sequence shown in SEQ ID NOS:1 or 2, or the complement thereof, wherein said isolated polynucleotide includes at least one polymorphic site shown in Table 1.

42. (New) The isolated, extrachromosomal polynucleotide of Claim 41 which is cDNA.

43. (New) The isolated, extrachromosomal polynucleotide of Claim 41 which is RNA.

44. (New) The isolated, extrachromosomal polynucleotide of Claim 41 which is genomic DNA.

45. (New) A kit comprising an isolated, extrachromosomal polynucleotide of Claim 29.

46. (New) A kit comprising an isolated, extrachromosomal polynucleotide of Claim 33.

47. (New) A kit comprising at least one pair of isolated, extrachromosomal polynucleotides as in Claim 32.

48. (New) A kit comprising at least one pair of isolated, extrachromosomal polynucleotides as in Claim 36.--